

$$\sqrt{I_{es}^2 + I_c^2} \leq I_{esmax}, \quad (1)$$

where I_{es} – is the real generation current; I_{sbmax} – maximum generation current;

$$I_c = \sqrt{\frac{1}{T} \int_t^{t+T} (i_{p-}^2 + i_q^2 + i_r^2) dt} - \quad (2)$$

current compensator, comparator (C), switches and the task of current compensator adds to the task signal.

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COMPUTER TECHNOLOGIES IN MODERN CONSTRUCTION

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The need to introduce information technology for the development of civil engineering is explained by the requirements for reducing the design and preparation time for the production of new and modernized products, the cost of design and production, and the cost of long-term after-sales service. Today we can notice a strong development of the functionality of computer-aided design, database management systems, project data management systems, automation calculation methods etc.

The process of urbanization of cities has led to the fact that the number of new construction objects is increasing every day. The structures of buildings begin to become more complex, which leads to the complication of calculations of load-bearing structures. Only computers, modern software and specialists who use them for work can solve such a complex and difficult task.

Today, special program complexes have been developed for help engineers for create designs for frame structures, and can even produce ready-made working drawings and schemes. These opportunities of computer technology can significantly speed up and simplify all design work. To install such a program, it is better to seek the help of specialists who can do everything quickly, and most

importantly - with high quality.

It should be noted that the development of the project is carried out in accordance with the standards, norms and requirements that apply in the construction field. With the introduction of basic data of architectural components into a program, it is possible to calculate not only the cost of a complete project, but also to find out the price of the building's nodes separately.

Thanks to computer modeling, the time for designing systems is greatly reduced, no matter how difficult they are. And there are also special programs that help to make construction estimates, and can also carry out not only the verification and comparative analysis of the estimate documentation, but also make an objective assessment of the existing tender proposals. And that's not all, as there are a large number of design programs that are aimed at creating internal metamorphosis of buildings.

Although there are so many softwares used in our Construction Industry but the usage depends on the profile we are working. Most of civil engineers remain confused when it comes to software though there are so many, which we need to learn. How many and what kind of software we should know to grow in our professional life?

For example, AutoCAD and 3D Max- the most popular software in civil engineering world designed by Auto-desk 2D and 3D design, drafting, modeling, architectural drawing etc. can be created by this software. This is the most powerful resource to express your imagination to write down, to draw or to plot them. Revit, Tekla – are building information modelling software for architects, landscape architects, structural engineers, MEP engineers, designers and contractors. Lira and Scad - computing complex for the strength analysis of structures by the finite element method, which uses in our country and neighboring countries.

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UDC 004.357

MAIN COMPONENTS OF MULTIMEDIA

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Multimedia is one of the most perspective and popular directions of information technology development. Their purpose — application creation, containing "collections of images, texts and data which are followed by a sound, video, animation and other visual the effects including the interactive interface and